Business Entities e-file (BEef)

In 2006, FTB will offer an electronic filing option for Business Entity Tax Returns called "Business Entities e-file", or **BEef**. This document provides an overview and description of the method prescribed for assembling business return files for electronic transmission. Like the Internal Revenue Service, the CA FTB has defined the component data structures for electronic filing.

Where appropriate, FTB has incorporated, by reference or emulation, structures and mechanisms already defined by the IRS for its business e-file program (MeF). Often FTB has even used some of the same terminology. The most prominent similarities between the state and federal programs are the layout of "Submissions" and the use of XML & Schemas to define data structures.

A notable difference between the FTB approach and that of the IRS is the use of a third-party solution (Tumbleweed's SecureTransport) for securely exchanging files over the Internet (via HTTPS and FTPS), instead of the *web services* method chosen by the IRS. Since FTB's BEef program does not use *web services*, our transmission structure does not require, nor will it support, SwA- &/or DIME-formatted messages at this time.

Data and File Compression

FTB uses a nested, ZIP-archive file structure. The transmissions themselves, as well as the attachments, are compressed using the DEFLATE (#8) method with the "Normal" (default) algorithm setting. "ZIP"-ed attachments are included in an "outer" ZIP transmission file to create a single file.

BEef transmissions, as well as any data compressed and included therein as an attachment, must conform to the ZLIB Compressed Data Format Specification v3.3 (RFC 1950) and the DEFLATE Compressed Data Format Specification v1.3 (RFC 1951). The internal data structure of compressed data must conform to operation-specific definitions (as defined within this document).

Also included in this BEef transmission file is a "Transmission Manifest" to preserve the data elements contained within the IRS's SOAP portion. But this "manifest" has only one layer of compression (while attachments have two).

The typical scenario is this:

1. A state return and its attachments, including a copy of the federal return, and a manifest of contents are compressed into a single **Submission** file (a ZIP archive).
2. One or more Submission files/archives and a manifest of contents are compressed into a single **Transmission** file (a ZIP archive) and uploaded to the BEef system by a transmitter. The manifest has one layer of compression; the attachments have two.
3. FTB responds to each successfully received Transmission by creating a **Receipt** containing a unique, FTB-generated identifier, the "Transmission Serial Number", and making it available to the appropriate transmitter for retrieval. A "Receipt" is not compressed since it is a single file that doesn't require a manifest and is already very small in size.
4. After processing a successfully received Transmission, FTB creates an **Acknowledgements** (ACKs) response that references the Transmission, all of the Submissions within, and their acceptances/rejections/specific errors/etc., and makes it available to the appropriate transmitter for retrieval. "ACKs" have only one layer of compression and no manifest.

BEef Transmissions

Initial "inbound" BEef Transmission files use the naming convention: <**Transmission ID**> + "**.zip**"

Transmission ID - The transmission ID uniquely identifies a transmission and must be 20 characters long. To ensure the global uniqueness of a transmission ID, the following format is required (see Table 1-1):

Table 1-1: Transmission ID Format

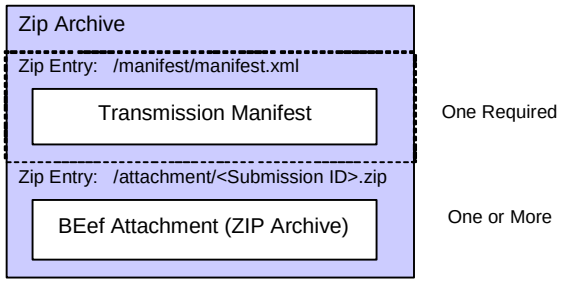
Element	Description
First 5 digits	ETIN
Next 4 digits	Current year
Next 3 digits	Julian date
Next 8 digits	Sequence number that uniquely identifies transmissions sent within a day for that ETIN.

For example, with a *Transmission ID* of "00130200607312345678":

- "00130" = ETIN;
- "2006" = Current year;
- "073" = Julian date;
- "12345678" = Daily unique ETIN Sequence number.

Figure 1-1 shows the logical structure of transmissions supported by the BEef system. This transmission type has an "outer" ZIP file that contains a manifest and one or more "inner" ZIP file attachments.

Figure 1-1: Structure of BEef Transmission



- **Transmission Manifest -** An XML document containing metadata about the transmission (see Table 1-2).
- **BEef Attachment(s) -** Operation-specific data containers (currently, only *Submissions*). Attachments are compressed and converted to a binary, ZIP-archive file format.

Table 1-2: Transmission Manifest Elements

Element	Definition
Transmission ID	A globally unique ID provided by the transmitter that must be unique for the transmitter for the tax year.
ETIN	Electronic Transmitter Identification Number of the transmitter sending the transmission.
Transmission Category	Type of transmission - [T]est or [P]roduction.
Transmission Timestamp	(Optional) The transmitter's time of transmission to FTB.
Submission Data List	List of submission data (Submission ID and Electronic Postmark). Each Submission ID will match up with a corresponding Submission ID in the manifest of one of the attached submissions. The list also contains a count of the number of items in the list, which also matches the number of submissions within this transmission.

Submission Attachments

Submission attachments use the naming convention: <**Submission ID**> + "**.zip**"

Submission ID - The submission ID uniquely identifies a submission and must be 20 characters in length. To ensure the global uniqueness of a submission ID, the following format is required (see Table 1-3):

Table 1-3: Submission ID Format

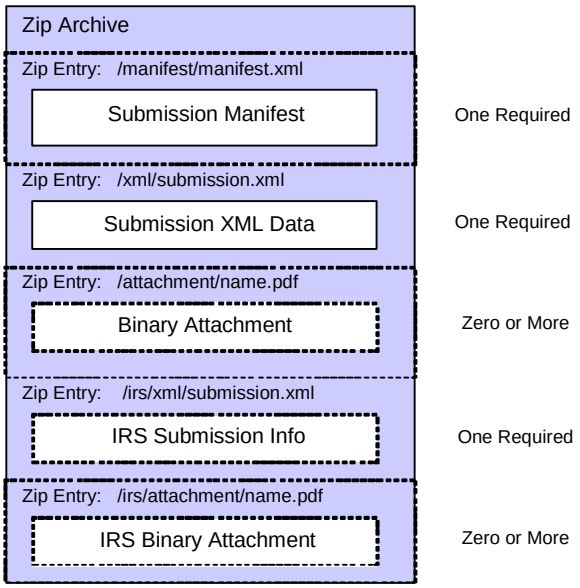
Element	Description
First 6 digits	EFIN
Next 4 digits	Current year
Next 3 digits	Julian date
Last 7 digits	Sequence number that uniquely identifies submissions sent within a day for that EFIN.

For example, with a *Submission ID* of "00349720060731234567":

- "003497" = EFIN;
- "2006" = Current year;
- "073" = Julian date;
- "1234567" = Daily unique EFIN Sequence number.

A Submission is a single business entity's tax data. Created by an Originator (ERO), these attachments (see Figure 1-2) are sent one or more at a time from transmitters to the BEef system via Transmissions ("outer" ZIP files).

Figure 1-2: Structure of Submission Attachment



- **Submission Manifest -** An XML document containing metadata about the submission (see Table 1-4).
- **Submission XML Data -** An XML document that conforms to its indicated submission type's CA FTB XML schema.

- **Binary Attachment -** A PDF file containing any taxpayer business documents associated with the submission with content as allowed by rules defined by CA FTB. Information describing the binary file is included in the Submission XML Data, according to CA FTB XML schema definitions.
- **IRS Submission Info -** An XML document that conforms to its indicated submission type's IRS XML schema.
- **IRS Binary Attachment -** A PDF file containing any taxpayer business documents associated with the IRS submission with content as allowed by rules defined by the IRS. Information describing the binary file is included in the Submission XML Data, according to IRS XML schema definitions.

Table 1-4: Submission Manifest Elements

Element	Definition
Submission ID	A globally unique identifier for the received submission created by the originator.
EFIN	IRS-provided Electronic Filer Identification Number of the originator of the submission.
Government Code	Identifies the government entity where the submission is to be filed - IRS, state, or other jurisdiction codes (always "CAST" for State of California).
Submission Type	Identifies the type of document being filed, using State form numbers or identifiers.
Tax Year	The tax year the submission applies to.
Submission Category	Identifies the submission category (always "CORP" for Corporate submission).
CA Business Entity ID	(Optional) The filers' unique California BE identifier (depending on form-type filed): Corporation # [7 digits], FEIN (Federal Employment ID #) [9 digits], SOSG (Secretary of State General Partnership #) [12 digits], or TEMP(orary #) [7 digits].
Name Control	(Optional) Business Name Control of the filer (Legal Characters: A-Z, 0-9, hyphen, and ampersand; Illegal Characters: spaces and symbols).
IRS Submission ID	(Optional) The submission ID of an IRS submission that the processing of this state submission depends on.

Receipt Response

The corresponding "outbound" BEef response file uses the naming convention:

<**Transmission ID**> + "**.**" + <**Transmission Serial #**> + "**R.xml**"

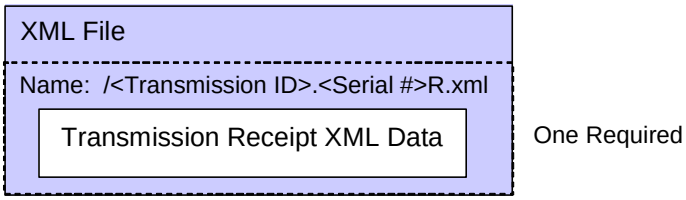
Receipt ID - The receipt ID uniquely identifies a transmission's receipt and must be 30 characters long. To ensure the global uniqueness of a receipt ID, the following format will be used (see Table 1-5):

Table 1-5: Receipt ID Format

Element	Description
First 20 digits	Transmission ID (see Table 1-1).
Next character	Value separator - "."
Next 8 digits	Transmission Serial Number (FTB generated unique ID sent to the transmitter as a receipt).
Last 1 alpha character	Response Type - "R" (Receipt).

Receipts are XML documents created (see Figure 1-3) for each transmission successfully received by the BEef system. They are then made available to only the appropriate transmitter for retrieval.

Figure 1-3: Structure of Receipt Response



- **Receipt XML Data** – An XML document that contains one BEef Transmission Receipt (see Table 1-6).

Table 1-6: Transmission Receipt Elements

Element	Definition
Transmission ID	A globally unique ID provided by the transmitter that must be unique for the transmitter for the tax year.
Receipt Timestamp	The date and time the CA FTB received the transmission.
Transmission Serial Number	A unique FTB-generated ID sent to the transmitter as a receipt.

Acknowledgements Response

The corresponding "outbound" BEef response file uses the naming convention:

<**Transmission ID**> + "**.**" + <**Transmission Serial #**> + "**A.zip**"

Acknowledgements ID - The acknowledgements ID uniquely identifies a transmission's acknowledgements and must be 30 characters long. To ensure the global uniqueness of an acknowledgements ID, the following format will be used (see Table 1-7):

Table 1-7: Acknowledgements ID Format

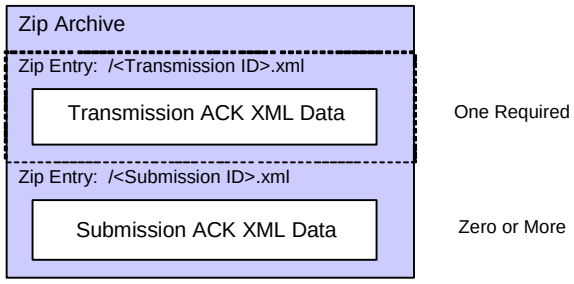
Element	Description
First 20 digits	Transmission ID (see Table 1-1).
Next character	Value separator - "."
Next 8 digits	Transmission Serial Number (FTB generated unique ID sent to the transmitter as a receipt).
Last 1 alpha character	Response Type - "A" (Acknowledgements).

Depending on the document contained therein, use the following naming conventions:

<**Transmission ID**> + "**.xml**" for *Transmission* Acknowledgements;
<**Submission ID**> + "**.xml**" for *Submission* Acknowledgements.

Acknowledgements are XML documents created for each transmission and submission processed by the BEef system. They are then "ZIP"-ed into an archive (see Figure 1-4) and made available to only the appropriate transmitter for retrieval.

Figure 1-4: Structure of Acknowledgements Response



- **Transmission ACK XML Data** – An XML document that contains one Transmission Acknowledgement (see Table 1-8).
- **Submission ACK XML Data** – An XML document that contains one Submission Acknowledgement (see Table 1-9).

Table 1-8: Transmission Acknowledgement Elements

Element	Definition
Transmission ID	A globally unique ID provided by the transmitter that must be unique for the transmitter for the tax year.
ETIN	Electronic Transmitter Identification Number of the transmitter sending the transmission.
Transmission Category	Type of transmission - [T]est or [P]roduction.
Receipt Timestamp	(Optional) The date and time the CA FTB received the transmission.
Transmission Serial Number	A unique FTB-generated ID sent to the transmitter as a receipt.
Transmission Status	Indicator whether the transmission is [A]ccepted or [R]ejected.
Status Timestamp	The date and time the transmission's status was acknowledged.
Error List	(Optional) List of Validation Errors (see Table 1-10) for a rejected transmission.

Table 1-9: Submission Acknowledgement Elements

Element	Definition
Submission ID	A globally unique identifier for the received submission created by the originator.
EFIN	IRS-provided Electronic Filer Identification Number of the originator of the submission.
Government Code	Identifies the government entity where the submission is to be filed - IRS, state, or other jurisdiction codes (always “CAST” for State of California).
Submission Type	Identifies the type of document being filed, using State form numbers or identifiers.
Tax Year	The tax year the submission applies to.
Submission Category	Identifies the submission category (always “CORP” for Corporate submission).
CA Business Entity ID	(Optional) The filers’ unique California BE identifier (depending on form-type filed): Corporation # [7 digits], FEIN (Federal Employment ID #) [9 digits], SOSG (Secretary of State General Partnership #) [12 digits], or TEMP(orary #) [7 digits].
IRS Submission ID	(Optional) The submission ID of an IRS submission that the processing of this state submission depends on.
Electronic Postmark	(Optional) The time stamp indicating when the transmitter received the originated return before sending it on to the CA FTB.
Filing Status	[A]ccepted or [R]ejected filing status of the submission.
Status Timestamp	The date and time the submission’s filing status was acknowledged.
Tax Period End Date	(Optional) The tax period end date of the submission.
Completed Validation	(Optional) Indicates whether the submission went through all possible validation processing (‘true’) or not (‘false’).
Error List	(Optional) List of Validation Errors (see Table 1-10) for a rejected submission.

Table 1-10: Validation Error Elements

Note: The following elements are optional for all acknowledgements and will be included (as a repeating group) for each error found during the validation of a rejected transmission or submission.	
Element	**Definition**
XPath	(Optional) The XPath expression of the location of an error in XML data with its full path from the root to the error element or attribute.
Error Category	The FTB-defined category for the reported error.
Error Message	Text describing the error, usually the rule text.
Rule Number	The FTB-assigned number for the rule creating the error.
Severity	([R]eject or Reject and [S]top) “Reject and Stop” errors cause validation of the transmission or submission to stop before any remaining validation rules are executed.
Data Value	(Optional) The value provided in the transmission or submission data for the element used in the validation rule.